10/608,898

COPC

Patent No. 6,926,971

Request for Cert. of Correction dated November 30, 2005

Attorney Docket No. 0916-030481

DEC 0 5 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reatent No.

6,926,971 B2

Confirmation No. 7789

**Inventor** 

William A. GROLL

Issued

August 9, 2005

Title

Bonded Metal Components Having Uniform Thermal

Conductivity Characteristics and Method of Making Same

Examiner

John J. Zimmerman

Customer No.

28289

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR PTO MISTAKE (37 C.F.R. 1.322(a))

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Certificate

DEC 0 7 2005

Of Correction

ATTENTION:

**Decision and Certificate of Correction Branch** 

Patent Issue Division

Sir:

In accordance with 35 U.S.C. §254, we attach hereto Form PTO/SB/44 and a copy of proof of PTO errors and request that a Certificate of Correction be issued in the above-identified patent. The following errors appear in the patent as printed:

<u>Column 7</u>, Line 22, Claim 5, "stainless steel a" should read -- stainless steel, a -- (See Amendment of March 3, 2005, page 3, Claim 6, Line 21. Claim 6 issued as Claim 5.)

<u>Column 7</u>, Line 67, Claim 9, "surface thereof;" should read -- surfaces thereof; -- (See Amendment of March 3, 2005, page 5, Line 2 in Claim 10. Claim 10 issued as Claim 9.)

<u>Column 8</u>, Line 2, Claim 9, "having surface" should read -- having surfaces -- (See Amendment of March 3, 2005, page 5, Line 4 in Claim 10. Claim 10 issued as Claim 9.)

<u>Column 8</u>, Lines 28-29, Claim 12, "Alclad to define" should read -- Alclad aluminum to define -- (See Amendment of March 3, 2005, page 5, Claim 13, Line 11. Claim 13 issued as Claim 12.)

Column 8, Line 42, Claim 15, "two outer layer" should read -- two outer layers -- (See Amendment of March 3, 2005, page 6, Claim 18, Line 4. Claim 18 issued as Claim 15.)

By

Respectfully submitted,

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(Also Form PTO-1050)

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO.

6,926,971 B2

APPLICATION NO.

10/608,898

**ISSUE DATE** 

August 9, 2005

INVENTOR

William A. GROLL

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 7, Line 22, Claim 5, "stainless steel a" should read -- stainless steel, a --

Column 7, Line 67, Claim 9, "surface thereof;" should read -- surfaces thereof; --

Column 8, Line 2, Claim 9, "having surface" should read -- having surfaces --

<u>Column 8</u>, Lines 28-29, Claim 12, "Alclad to define" should read -- Alclad aluminum to define --

Column 8, Line 42, Claim 15, "two outer layer" should read -- two outer layers --

MAILING ADDRESS OF SENDER: The Webb Law Firm

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-2450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select Option 2.

Appl. No. 10/608,898 Amdt. dated March 3, 2005

Reply to Final Office Action of 09/10/2004

Attorney Docket No. 916-030481

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ppl. No.

10/608,898

Confirmation No. 7789

**Applicant** 

William A. Groll

Filed

June 27, 2003

Title

Bonded Metal Components Having Uniform Thermal

Conductivity Characteristics and Method of Making Same

**Group Art Unit** 

1775

Examiner

John J. Zimmerman

Customer No.

28289

MAIL STOP RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## **AMENDMENT**

Sir:

In response to the final Office Action of September 10, 2004, and Advisory Action dated February 14, 2005, Applicant submits the enclosed Request for Continuing Examination (RCE) and the following amendments and remarks.

Amendments to the Claims are reflected in the listing of claims which begin on page 2 of this paper.

Remarks begin on page 10 of this paper.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on March 3, 2005.

Diane Paull
(Name of Person Mailing Paper)

O3/03/2005
Signature

O3/03/2005

Appl. No. 10/608,898 Amdt. dated March 3, 2005 Reply to Final Office Action of 09/10/2004 Attorney Docket No. 916-030481

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5. (Original) An iron having a sole plate made from a multi-layered composite sheet or plate having improved uniform thermal transfer properties, said composite sheet comprising a plurality of roll bonded metal layers including an inner layer of a metal having a coefficient of thermal conductivity lower than adjacent metal layers whereby said inner layer retards heat flow in a transverse direction to cause said inner layer to distribute heat in a lateral direction.

(Currently Amended) A method of making cookware-made from a multi-layered composite metal sheet comprising the steps of:

- (a) providing a plurality of metal sheets including a core layer comprising at least one sheet selected from the group consisting of titanium, titanium alloy and of stainless steel and at least two first and second sheets selected from the group consisting of pure aluminum and Alclad aluminum facing said stainless steel core layer, a further sheet of a metal selected from the group consisting of aluminum and stainless steel;
- (b) preparing said metal sheets by removing an oxide surface layer from surfaces thereof;
- (c) stacking said metal sheets in an to form an ordered array such that adjacent sheets having surfaces prepared from step (b) are facing each other and wherein the titanium, titanium alloy or stainless steel sheet is sandwiched between the pure aluminum or Alclad aluminum sheets and forms a core layer of the ordered array the further sheet of aluminum or stainless steel faces one of the pure aluminum or Alclad aluminum sheets;
  - (d) heating said ordered array to a <u>uniform</u> rolling temperature;
- (e) rolling said ordered array to a desired thickness to form a roll bonded composite sheet; and
- (f) drawing said roll bonded composite to form cookware of a desired configuration comprising in an ordered array: a cooking surface formed by a layer of pure aluminum or Alclad aluminum, a thermal barrier layer of stainless steel, a layer of pure aluminum or Alclad aluminum and a layer of aluminum or stainless steel forming the outer surface of said cookware.
- 7. (Previously Presented) The method of claim 6 wherein the metal sheets provided in step (a) include at least two sheets of Alclad aluminum which are stacked in step (c) on opposed sides of said core layer.

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- (b) preparing said metal sheets by removing an oxide surface layer from surfaces thereof;
- (c) stacking said metal sheets in an ordered array such that adjacent sheets having surfaces prepared from step (b) are facing each other and wherein the titanium, titanium alloy or stainless steel sheet is sandwiched between the pure aluminum or Alclad aluminum sheets and forms a core layer of the ordered array;
- (d) heating the <u>said</u> ordered array in a furnace or oven containing atmospheric oxygen to the <u>to a rolling</u> temperature of between 550° to 600°F.

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- 11. (Previously Presented) A method of making the cookware of claim 10 wherein the rolling step (e) comprises a first rolling reduction of at least 5% to about 10% followed by reheating to about 550°-600°F, rolling a second pass, and thereafter heat treating at about 650°-700°F to improve bonding strength in the multi-layered composite metal sheet.
- 12. (Original) The method of claim 11, including the step of applying a non-stick layer to a cook surface of the cookware.

(Currently Amended) Cookware made from a bonded metal composite comprising:

- (a) a core layer consisting of at least one core layer of a metal selected from the group consisting of stainless steel, titanium and titanium alloy; and
- (b) two outer upper and lower layers consisting of pure aluminum or Alclad aluminum, each layer roll bonded on to upper and lower sides of said core layer.
- (c) a further layer of stainless steel roll bonded to the upper layer of the pure aluminum or Alclad aluminum to define a cook surface of said cookware; and
  - (d) a further layer of stainless steel or aluminum roll bonded to the lower layer of pure aluminum, or Alclad aluminum to define an outer surface of said cookware.
  - 14. (Canceled)
  - 15. (Canceled)

Appl. No. 10/608,898 Amdt. dated March 3, 2005 Reply to Final Office Action of 09/10/2004 Attorney Docket No. 916-030481

16. (Currently Amended) The cookware of claim 13, wherein one of the outer layers of pure aluminum or Alclad aluminum opposite a cook surface the further layer of stainless steel or aluminum defining the outer surface of said cookware is aluminum, wherein said further layer of aluminum is anodized for improved scratch resistance and enhanced appearance.

further 17. (Currently Amended)

The cookware of claim 16, wherein an outer the layer. of stainless steel defining the upper layer of pure aluminum or Alclad aluminum forming said cook surface has a non-stick layer applied thereto.

Cookware made from a bonded metal composite comprising:

- (a) a core layer is one consisting of titanium or titanium alloy; and
- (b) two outer layers consisting of pure aluminum or Alclad aluminum,

  each layer roll bonded to upper and lower sides of said core layer.
  - (New) Cookware made from a bonded metal composite comprising:
  - (a) a layer of stainless steel at or adjacent a cook surface of the cookware;
    - (b) a layer of pure aluminum or Alclad aluminum bonded to layer (a);
    - (c) a layer of stainless steel bonded to layer (b);
    - (d) a layer of pure aluminum or Alclad aluminum bonded to layer (c); and
  - (e) a layer of stainless steel bonded to layer (d) defining an outer surface of the cookware,

whereby layer (c) retards heat flow in a transverse direction to cause said layer (c) to distribute heat uniformly in a lateral direction to prevent hot spots from forming on the cook surface and thereby improve cooking performance.

- 20. (New) The cookware of claim 19 including a non-stick layer applied to layer (a).
  - 21. (New) Cookware made from a bonded metal composite comprising: